

**CRF Errors Edited by the STIC Systems
Branch**

Serial Number: 091908,992B

CRF Edit Date: 1/23/04
Edited by: AN

ENTERED

Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

Corrected the SEQ ID NO. Sequence numbers edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Deleted: invalid beginning/end-of-file text ; page numbers

Inserted mandatory headings/numeric identifiers, specifically:

Moved responses to same line as heading/numeric identifier, specifically:

Other:

corrected 1607 response from "29" to "30"



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/908,992B

DATE: 01/23/2004

TIME: 11:04:35

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01232004\I908992B.raw

3 <110> APPLICANT: SYKEN, JOSH
 4 MUNGER, KARL
 6 <120> TITLE OF INVENTION: METHODS AND REAGENTS TO REGULATE APOPTOSIS
 8 <130> FILE REFERENCE: HMV-054.01
 10 <140> CURRENT APPLICATION NUMBER: 09/908,992B
 11 <141> CURRENT FILING DATE: 2001-07-19
 13 <150> PRIOR APPLICATION NUMBER: 60/219,718
 14 <151> PRIOR FILING DATE: 2000-07-19
 16 <150> PRIOR APPLICATION NUMBER: 60/219,537
 17 <151> PRIOR FILING DATE: 2000-07-20
 19 <160> NUMBER OF SEQ ID NOS: 30
 21 <170> SOFTWARE: PatentIn Ver. 2.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 2656
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
 28 <220> FEATURE:
 29 <221> NAME/KEY: CDS
 30 <222> LOCATION: (32)..(1471)
 32 <400> SEQUENCE: 1

P.6

ENTERED

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34	Met Ala Ala Arg Cys Ser Thr	
35	1 5	
37	cgc tgg ttg ctg gtg gtt gtg ggg acc ccg cgg ctg ccg gct ata tcg	100
38	Arg Trp Leu Leu Val Val Val Gly Thr Pro Arg Leu Pro Ala Ile Ser	
39	10 15 20	
41	ggt aga ggg gcc cgg ccg ccc agg gag ggc gtg gtg ggg gca tgg ctg	148
42	Gly Arg Gly Ala Arg Pro Pro Arg Glu Gly Val Val Gly Ala Trp Leu	
43	25 30 35	
45	agc cgc aag ctg agc gtc ccc gcc ttt gcg tct tcc ctg acc tct tgc	196
46	Ser Arg Lys Leu Ser Val Pro Ala Phe Ala Ser Ser Leu Thr Ser Cys	
47	40 45 50 55	
49	ggc ccc cga gcg ctg ctg aca ttg aga cct ggt gtc agc ctt aca gga	244
50	Gly Pro Arg Ala Leu Leu Thr Leu Arg Pro Gly Val Ser Leu Thr Gly	
51	60 65 70	
53	aca aaa cat aac cct ttc att tgt act gcc tcc ttc cac acg agt gcc	292
54	Thr Lys His Asn Pro Phe Ile Cys Thr Ala Ser Phe His Thr Ser Ala	
55	75 80 85	
57	cct ttg gcc aaa gaa gat tat tat cag ata tta gga gtg cct cga aat	340
58	Pro Leu Ala Lys Glu Asp Tyr Tyr Gln Ile Leu Gly Val Pro Arg Asn	
59	90 95 100	
61	gcc agc cag aaa gag atc aag aaa gcc tat tat cag ctt gcc aag aag	388
62	Ala Ser Gln Lys Glu Ile Lys Lys Ala Tyr Tyr Gln Leu Ala Lys Lys	

RAW SEQUENCE LISTING

DATE: 01/23/2004

PATENT APPLICATION: US/09/908,992B

TIME: 11:04:35

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01232004\I908992B.raw

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66	Tyr His Pro Asp Thr Asn Lys Asp Asp Pro Lys Ala Lys Glu Lys Phe				
67	120 125 130 135				
69	tcc cag ctg gca gaa gcc tat gag gtt ttg agt gat gag gtg aag agg	484			
70	Ser Gln Leu Ala Glu Ala Tyr Glu Val Leu Ser Asp Glu Val Lys Arg				
71	140 145 150				
73	aag cag tac gat gcc tac ggc tct gca ggc ttc gat cct ggg gcc agc	532			
74	Lys Gln Tyr Asp Ala Tyr Gly Ser Ala Gly Phe Asp Pro Gly Ala Ser				
75	155 160 165				
77	ggc tcc cag cat agc tac tgg aag gga ggc ccc act gtg gac ccc gag	580			
78	Gly Ser Gln His Ser Tyr Trp Lys Gly Gly Pro Thr Val Asp Pro Glu				
79	170 175 180				
81	gag ctg ttc agg aag atc ttt ggc gag ttc tca tcc tct tca ttt gga	628			
82	Glu Leu Phe Arg Lys Ile Phe Gly Glu Phe Ser Ser Ser Ser Phe Gly				
83	185 190 195				
85	gat ttc cag acc gtg ttt gat cag cct cag gaa tac ttc atg gag ttg	676			
86	Asp Phe Gln Thr Val Phe Asp Gln Pro Gln Glu Tyr Phe Met Glu Leu				
87	200 205 210 215				
89	aca ttc aat caa gct gca aag ggg gtc aac aag gag ttc acc gtg aac	724			
90	Thr Phe Asn Gln Ala Ala Lys Gly Val Asn Lys Glu Phe Thr Val Asn				
91	220 225 230				
93	atc atg gac acg tgt gag cgc tgc aac ggc aag ggg aac gag ccc ggc	772			
94	Ile Met Asp Thr Cys Glu Arg Cys Asn Gly Lys Gly Asn Glu Pro Gly				
95	235 240 245				
97	acc aag gtg cag cat tgc cac tac tgt ggc ggc tcc ggc atg gaa acc	820			
98	Thr Lys Val Gln His Cys His Tyr Cys Gly Gly Ser Gly Met Glu Thr				
99	250 255 260				
101	atc aac aca ggc cct ttt gtg atg cgt tcc acg tgt agg aga tgt ggt	868			
102	Ile Asn Thr Gly Pro Phe Val Met Arg Ser Thr Cys Arg Arg Cys Gly				
103	265 270 275				
105	ggc cgc ggc tcc atc atc ata tcg ccc tgt gtg gtc tgc agg gga gca	916			
106	Gly Arg Gly Ser Ile Ile Ile Ser Pro Cys Val Val Cys Arg Gly Ala				
107	280 285 290 295				
109	gga caa gcc aag cag aaa aag cga gtg atg atc cct gtg cct gca gga	964			
110	Gly Gln Ala Lys Gln Lys Lys Arg Val Met Ile Pro Val Pro Ala Gly				
111	300 305 310				
113	gtc gag gat ggc cag acc gtg agg atg cct gtg gga aaa agg gaa att	1012			
114	Val Glu Asp Gly Gln Thr Val Arg Met Pro Val Gly Lys Arg Glu Ile				
115	315 320 325				
117	ttc att acg ttc agg gtg cag aaa agc cct gtg ttc cgg agg gac ggc	1060			
118	Phe Ile Thr Phe Arg Val Gln Lys Ser Pro Val Phe Arg Arg Asp Gly				
119	330 335 340				
121	gca gac atc cac tcc gac ctc ttt att tct ata gct cag gct ctt ctt	1108			
122	Ala Asp Ile His Ser Asp Leu Phe Ile Ser Ile Ala Gln Ala Leu Leu				
123	345 350 355				
125	ggg gga aca gcc aga gcc cag ggc ctg tac gag acg atc aac gtg acg	1156			
126	Gly Gly Thr Ala Arg Ala Gln Gly Leu Tyr Glu Thr Ile Asn Val Thr				
127	360 365 370 375				

RAW SEQUENCE LISTING

DATE: 01/23/2004

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TIME: 11:04:35

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01232004\I908992B.raw

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130 Ile Pro Pro Gly Thr Gln Thr Asp Gln Lys Ile Arg Met Gly Gly Lys
131 380 385 390
133 ggc atc ccc cgg att aac agc tac ggc tac gga gac cac tac atc cac 1252
134 Gly Ile Pro Arg Ile Asn Ser Tyr Gly Tyr Gly Asp His Tyr Ile His
135 395 400 405
137 atc aag ata cga gtt cca aag agg cta acg agc cgg cag cag agc ctg 1300
138 Ile Lys Ile Arg Val Pro Lys Arg Leu Thr Ser Arg Gln Gln Ser Leu
139 410 415 420
141 atc ctg agc tac gcc gag gac gag aca gat gtg gag ggg acg gtg aac 1348
142 Ile Leu Ser Tyr Ala Glu Asp Glu Thr Asp Val Glu Gly Thr Val Asn
143 425 430 435
145 ggc gtc acc ctc acc agc tct ggt ggc agc acc atg gat agc tcc gca 1396
146 Gly Val Thr Leu Thr Ser Ser Gly Gly Ser Thr Met Asp Ser Ser Ala
147 440 445 450 455
149 gga agc aag gct agg cgt gag gct ggg gag gac gag gag gga ttc ctt 1444
150 Gly Ser Lys Ala Arg Arg Glu Ala Gly Glu Asp Glu Glu Gly Phe Leu
151 460 465 470
153 tcc aaa ctt aag aaa atg ttt acc tca tgatatccca gccgaggaaa 1491
154 Ser Lys Leu Lys Lys Met Phe Thr Ser
155 475 480
157 aagatccact ggaaactagg ccggaagca gcagcccctc caagggccag ggcacctggg 1551
159 agacgggagg attccagaac agcagcactg agctcccacc cgcagagcct ctggacggcc 1611
161 ttggcaacag caaatcatg ggacaacacc tctctccacg gaaaggtcac agtggacagc 1671
163 ccgggcagta ggatgcagcc ccagaggctg gtggcagttt cctgtccatt ggtaggtgac 1731
165 ggccccctgg tcagcagagg agagggttaga tcttgccaggc taaaactcta atttgaatt 1791
167 gaatattgtg gatattcttag ttaaaggcca tgcttacagc ttagaaatga agccttaagc 1851
169 tgcatacaagt tacgaagtga ttaatttctt tctcagcaaa cctccgggag gttccagaat 1911
171 gagttcttcc tgacagggtt tcttcaactg gagcgtgggg cccccaggcc ccaccagcac 1971
173 cgtcctcccc taatgagggg ccctgccgag gcatcagctg ctctgctcag ttagttttta 2031
175 ttccccgggt accaagcagc tgcacagtcg gtgcctggga agcacgttaa aggcccagag 2091
177 agatcctggg ggttctgtc tgaccgtgtg ggtggtgatc cttgtcagga tgtacagtcc 2151
179 ttgtctccac cccatccggg atggccgcct gtccctgact attgagtcct gttgttgtaa 2211
181 gccaggcatg gagggctcct gcccttctgc tgagccacag ccattgcag cactgtgtctg 2271
183 gccagacttc agctgccttg ggaactgaag ccctgccact gttgctagtc aggggcttg 2331
185 ttctcccact tacactgttg acatctatct tctgaagtgt gtttaaatta ttcagtgtca 2391
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189 gaaggttccc caccattcag tgagagcaga acccccattc cccagcctct gctggtagca 2511
191 tgtcgcagtt tccatgtgtt tcaggatctt cgggctgtcg ttagacaggt taatgaagaa 2571
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199 <211> LENGTH: 1443
200 <212> TYPE: DNA
201 <213> ORGANISM: Homo sapiens
203 <220> FEATURE:
204 <221> NAME/KEY: CDS
205 <222> LOCATION: (1)..(1440)
207 <400> SEQUENCE: 2

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RAW SEQUENCE LISTING

DATE: 01/23/2004

PATENT APPLICATION: US/09/908,992B

TIME: 11:04:35

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Output Set: N:\CRF4\01232004\I908992B.raw

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210	1				5					10					15		
212	ccg	cgg	ctg	ccg	gct	ata	tcg	ggt	aga	ggg	gcc	cgg	ccg	ccc	agg	gag	96
213	Pro	Arg	Leu	Pro	Ala	Ile	Ser	Gly	Arg	Gly	Ala	Arg	Pro	Pro	Arg	Glu	
214				20					25					30			
216	ggc	gtg	gtg	ggg	gca	tgg	ctg	agc	cgc	aag	ctg	agc	gtc	ccc	gcc	ttt	144
217	Gly	Val	Val	Gly	Ala	Trp	Leu	Ser	Arg	Lys	Leu	Ser	Val	Pro	Ala	Phe	
218		35						40					45				
220	gcg	tct	tcc	ctg	acc	tct	tgc	ggc	ccc	cga	gcg	ctg	ctg	aca	ttg	aga	192
221	Ala	Ser	Ser	Leu	Thr	Ser	Cys	Gly	Pro	Arg	Ala	Leu	Leu	Thr	Leu	Arg	
222		50					55					60					
224	cct	ggt	gtc	agc	ctt	aca	gga	aca	aaa	cat	aac	cct	ttc	att	tgt	act	240
225	Pro	Gly	Val	Ser	Leu	Thr	Gly	Thr	Lys	His	Asn	Pro	Phe	Ile	Cys	Thr	
226	65					70				75					80		
228	gcc	tcc	ttc	cac	acg	agt	gcc	cct	ttg	gcc	aaa	gaa	gat	tat	tat	cag	288
229	Ala	Ser	Phe	His	Thr	Ser	Ala	Pro	Leu	Ala	Lys	Glu	Asp	Tyr	Tyr	Gln	
230				85					90					95			
232	ata	tta	gga	gtg	cct	cga	aat	gcc	agc	cag	aaa	gag	atc	aag	aaa	gcc	336
233	Ile	Leu	Gly	Val	Pro	Arg	Asn	Ala	Ser	Gln	Lys	Glu	Ile	Lys	Lys	Ala	
234			100					105				110					
236	tat	tat	cag	ctt	gcc	aag	aag	tat	cac	cct	gac	aca	aat	aag	gat	gat	384
237	Tyr	Tyr	Gln	Leu	Ala	Lys	Lys	Tyr	His	Pro	Asp	Thr	Asn	Lys	Asp	Asp	
238		115						120				125					
240	ccc	aaa	gcc	aag	gag	aag	ttc	tcc	cag	ctg	gca	gaa	gcc	tat	gag	gtt	432
241	Pro	Lys	Ala	Lys	Glu	Lys	Phe	Ser	Gln	Leu	Ala	Glu	Ala	Tyr	Glu	Val	
242		130					135					140					
244	ttg	agt	gat	gag	gtg	aag	agg	aag	cag	tac	gat	gcc	tac	ggc	tct	gca	480
245	Leu	Ser	Asp	Glu	Val	Lys	Arg	Lys	Gln	Tyr	Asp	Ala	Tyr	Gly	Ser	Ala	
246	145					150					155				160		
248	ggc	ttc	gat	cct	ggg	gcc	agc	ggc	tcc	cag	cat	agc	tac	tgg	aag	gga	528
249	Gly	Phe	Asp	Pro	Gly	Ala	Ser	Gly	Ser	Gln	His	Ser	Tyr	Trp	Lys	Gly	
250				165					170					175			
252	ggc	ccc	act	gtg	gac	ccc	gag	gag	ctg	ttc	agg	aag	atc	ttt	ggc	gag	576
253	Gly	Pro	Thr	Val	Asp	Pro	Glu	Glu	Leu	Phe	Arg	Lys	Ile	Phe	Gly	Glu	
254			180						185				190				
256	ttc	tca	tcc	tct	tca	ttt	gga	gat	ttc	cag	acc	gtg	ttt	gat	cag	cct	624
257	Phe	Ser	Ser	Ser	Ser	Phe	Gly	Asp	Phe	Gln	Thr	Val	Phe	Asp	Gln	Pro	
258		195						200				205					
260	cag	gaa	tac	ttc	atg	gag	ttg	aca	ttc	aat	caa	gct	gca	aag	ggg	gtc	672
261	Gln	Glu	Tyr	Phe	Met	Glu	Leu	Thr	Phe	Asn	Gln	Ala	Ala	Lys	Gly	Val	
262		210					215					220					
264	aac	aag	gag	ttc	acc	gtg	aac	atc	atg	gac	acg	tgt	gag	cgc	tgc	aac	720
265	Asn	Lys	Glu	Phe	Thr	Val	Asn	Ile	Met	Asp	Thr	Cys	Glu	Arg	Cys	Asn	
266	225					230					235				240		
268	ggc	aag	ggg	aac	gag	ccc	ggc	acc	aag	gtg	cag	cat	tgc	cac	tac	tgt	768
269	Gly	Lys	Gly	Asn	Glu	Pro	Gly	Thr	Lys	Val	Gln	His	Cys	His	Tyr	Cys	
270				245					250				255				
272	ggc	ggc	tcc	ggc	atg	gaa	acc	atc	aac	aca	ggc	cct	ttt	gtg	atg	cgt	816

RAW SEQUENCE LISTING

DATE: 01/23/2004

PATENT APPLICATION: US/09/908,992B

TIME: 11:04:35

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01232004\I908992B.raw

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277 Ser Thr Cys Arg Arg Cys Gly Gly Arg Gly Ser Ile Ile Ile Ser Pro
278          275          280          285
280 tgt gtg gtc tgc agg gga gca gga caa gcc aag cag aaa aag cga gtg 912
281 Cys Val Val Cys Arg Gly Ala Gly Gln Ala Lys Gln Lys Lys Arg Val
282          290          295          300
284 atg atc cct gtg cct gca gga gtc gag gat ggc cag acc gtg agg atg 960
285 Met Ile Pro Val Pro Ala Gly Val Glu Asp Gly Gln Thr Val Arg Met
286 305          310          315          320
288 cct gtg gga aaa agg gaa att ttc att acg ttc agg gtg cag aaa agc 1008
289 Pro Val Gly Lys Arg Glu Ile Phe Ile Thr Phe Arg Val Gln Lys Ser
290          325          330          335
292 cct gtg ttc cgg agg gac ggc gca gac atc cac tcc gac ctc ttt att 1056
293 Pro Val Phe Arg Arg Asp Gly Ala Asp Ile His Ser Asp Leu Phe Ile
294          340          345          350
296 tct ata gct cag gct ctt ctt ggg gga aca gcc aga gcc cag ggc ctg 1104
297 Ser Ile Ala Gln Ala Leu Leu Gly Gly Thr Ala Arg Ala Gln Gly Leu
298          355          360          365
300 tac gag acg atc aac gtg acg atc ccc cct ggg act cag aca gac cag 1152
301 Tyr Glu Thr Ile Asn Val Thr Ile Pro Pro Gly Thr Gln Thr Asp Gln
302          370          375          380
304 aag att cgg atg ggt ggg aaa ggc atc ccc cgg att aac agc tac ggc 1200
305 Lys Ile Arg Met Gly Gly Lys Gly Ile Pro Arg Ile Asn Ser Tyr Gly
306 385          390          395          400
308 tac gga gac cac tac atc cac atc aag ata cga gtt cca aag agg cta 1248
309 Tyr Gly Asp His Tyr Ile His Ile Lys Ile Arg Val Pro Lys Arg Leu
310          405          410          415
312 acg agc cgg cag cag agc ctg atc ctg agc tac gcc gag gac gag aca 1296
313 Thr Ser Arg Gln Gln Ser Leu Ile Leu Ser Tyr Ala Glu Asp Glu Thr
314          420          425          430
316 gat gtg gag ggg acg gtg aac ggc gtc acc ctc acc agc tct ggt ggc 1344
317 Asp Val Glu Gly Thr Val Asn Gly Val Thr Leu Thr Ser Ser Gly Gly
318          435          440          445
320 agc acc atg gat agc tcc gca gga agc aag gct agg cgt gag gct ggg 1392
321 Ser Thr Met Asp Ser Ser Ala Gly Ser Lys Ala Arg Arg Glu Ala Gly
322          450          455          460
324 gag gac gag gag gga ttc ctt tcc aaa ctt aag aaa atg ttt acc tca 1440
325 Glu Asp Glu Glu Gly Phe Leu Ser Lys Leu Lys Lys Met Phe Thr Ser
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331 <210> SEQ ID NO: 3
332 <211> LENGTH: 1362
333 <212> TYPE: DNA
334 <213> ORGANISM: Homo sapiens
336 <220> FEATURE:
337 <221> NAME/KEY: CDS
338 <222> LOCATION: (1)..(1359)

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/908,992B

DATE: 01/23/2004
TIME: 11:04:36

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\01232004\I908992B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:28; Xaa Pos. 206,207,208,209,210,211,212,213,214,215,216,217,218,219
Seq#:28; Xaa Pos. 220,221,222,223,224
Seq#:29; Xaa Pos. 206,207,208,209,210,211,212,213,214,215,216,217,218,219
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VERIFICATION SUMMARY

DATE: 01/23/2004

PATENT APPLICATION: US/09/908,992B

TIME: 11:04:36

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01232004\I908992B.raw

L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:192
L:1240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:208
L:1339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:192
L:1342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:208



1600

RAW SEQUENCE LISTING

DATE: 01/16/2004

PATENT APPLICATION: US/09/908,992B

TIME: 14:25:55

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\01162004\I908992B.raw

3 <110> APPLICANT: SYKEN, JOSH
 4 MUNGER, KARL
 6 <120> TITLE OF INVENTION: METHODS AND REAGENTS TO REGULATE APOPTOSIS
 8 <130> FILE REFERENCE: HMV-054.01
 10 <140> CURRENT APPLICATION NUMBER: 09/908,992B
 11 <141> CURRENT FILING DATE: 2001-07-19
 13 <150> PRIOR APPLICATION NUMBER: 60/219,718
 14 <151> PRIOR FILING DATE: 2000-07-19
 16 <150> PRIOR APPLICATION NUMBER: 60/219,537
 17 <151> PRIOR FILING DATE: 2000-07-20
 E--> 19 <160> NUMBER OF SEQ ID NOS: (29) 30 (see below)
 21 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

1390 <210> SEQ ID NO: 30
 1391 <211> LENGTH: 453
 1392 <212> TYPE: PRT
 1393 <213> ORGANISM: Homo sapiens
 1395 <400> SEQUENCE: 30
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 1405 Gly Val Val Gly Ala Trp Leu Ser Arg Lys Leu Ser Val Pro Ala Phe
 1406 35 40 45
 1409 Ala Ser Ser Leu Thr Ser Cys Gly Pro Arg Ala Leu Leu Thr Leu Arg
 1410 50 55 60
 1413 Pro Gly Val Ser Leu Thr Gly Thr Lys His Asn Pro Phe Ile Cys Thr
 1414 65 70 75 80
 1417 Ala Ser Phe His Thr Ser Ala Pro Leu Ala Lys Glu Asp Tyr Tyr Gln
 1418 85 90 95
 1421 Ile Leu Gly Val Pro Arg Asn Ala Ser Gln Lys Glu Ile Lys Lys Ala
 1422 100 105 110
 1425 Tyr Tyr Gln Leu Ala Lys Lys Tyr Gln Pro Asp Thr Asn Lys Asp Asp
 1426 115 120 125
 1429 Pro Lys Ala Lys Glu Lys Phe Ser Gln Leu Ala Glu Ala Tyr Glu Val
 1430 130 135 140
 1433 Leu Ser Asp Glu Val Lys Arg Lys Gln Tyr Asp Ala Tyr Gly Ser Ala
 1434 145 150 155 160
 1437 Gly Phe Asp Pro Gly Ala Ser Gly Ser Gln His Ser Tyr Trp Lys Gly
 1438 165 170 175

last sequence in submitted file

*Does Not Comply
Corrected Diskette Needed
see p.2*

RAW SEQUENCE LISTING

DATE: 01/16/2004

PATENT APPLICATION: US/09/908,992B

TIME: 14:25:55

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\01162004\I908992B.raw

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1449 Gln Glu Tyr Phe Met Glu Leu Thr Phe Asn Gln Ala Ala Lys Gly Val
1450             210             215             220
1453 Asn Lys Glu Phe Thr Val Asn Ile Met Asp Thr Cys Glu Arg Cys Asn
1454 225             230             235             240
1457 Gly Lys Gly Asn Glu Pro Gly Thr Lys Val Gln His Cys His Tyr Cys
1458             245             250             255
1461 Gly Gly Ser Gly Met Glu Thr Ile Asn Thr Gly Pro Phe Val Met Arg
1462             260             265             270
1465 Ser Thr Cys Arg Arg Cys Gly Gly Arg Gly Ser Ile Ile Ile Ser Pro
1466             275             280             285
1469 Cys Val Val Cys Arg Gly Ala Gly Gln Ala Lys Gln Lys Lys Arg Val
1470             290             295             300
1473 Met Ile Pro Val Pro Ala Gly Val Glu Asp Gly Gln Thr Val Arg Met
1474 305             310             315             320
1477 Pro Val Gly Lys Arg Glu Ile Phe Ile Thr Phe Arg Val Gln Lys Ser
1478             325             330             335
1481 Pro Val Phe Arg Arg Asp Gly Ala Asp Ile His Ser Asp Leu Phe Ile
1482             340             345             350
1485 Ser Ile Ala Gln Ala Leu Leu Gly Gly Thr Ala Arg Ala Gln Gly Leu
1486             355             360             365
1489 Tyr Glu Thr Ile Asn Val Thr Ile Pro Pro Gly Thr Gln Thr Asp Gln
1490             370             375             380
1493 Lys Ile Arg Met Gly Gly Lys Gly Ile Pro Arg Ile Asn Ser Tyr Gly
1494 385             390             395             400
1497 Tyr Gly Asp His Tyr Ile His Ile Lys Ile Arg Val Pro Lys Arg Leu
1498             405             410             415
1501 Thr Ser Arg Gln Gln Ser Leu Ile Leu Ser Tyr Ala Glu Asp Glu Thr
1502             420             425             430
1505 Asp Val Glu Gly Thr Val Asn Gly Val Thr Leu Thr Ser Ser Gly Lys
1506             435             440             445
1509 Arg Ser Thr Gly Asn
1510             450

```

E--> 1511 - 1 - delete

VERIFICATION SUMMARY

DATE: 01/16/2004

PATENT APPLICATION: US/09/908,992B

TIME: 14:25:56

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\01162004\I908992B.raw

L:1237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:192
M:341 Repeated in SeqNo=28
L:1339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:192
M:341 Repeated in SeqNo=29
L:1511 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:30
L:19 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (29) Counted (30)